Amendments to the Specification

Please amend the paragraph beginning on page 3, line 13 of the application, as follows:

~~The solution according to the invention is characterized by the features of claims 1 and 10. Advantageous configurations are presented in the subclaims.~~

Please amend the paragraph beginning on page 3, line 16 of the application, as follows:

A drive unit having an internal combustion engine with a crankshaft as well as an exhaust gas line and an exhaust gas turbine that can by loaded by the exhaust gas line and which is connected downstream to the combustion engine as well as a hydrodynamic coupling which is disposed between the crankshaft and the exhaust gas turbine is designed according to the invention in such a way that, taking into consideration the respective multiplication of the transfer elements between the hydrodynamic coupling and the exhaust gas turbine, as well as between the hydrodynamic coupling and the crankshaft, the hydrodynamic coupling is configured in such a way that the latter is suitable, in the partial load operation, taking into consideration the multiplication between the primary wheel and the exhaust gas turbine, for transferring a moment, which corresponds to a minimum receivable moment M_{min-5} of the exhaust gas turbine at a low speed and, further, receives a minimum moment in the operating state of braking operation with the engine brake when the exhaust gas turbine is at maximum speed. This means that in the two operating states, the hydrodynamic coupling, which is free of a guide wheel, is characterized by a characteristic, which is depicted by a small transferable moment over the entire operating range, particularly over the speed difference range of the hydrodynamic coupling. This can be achieved by the invention according to a first solution approach with the use of a hydrodynamic coupling with invariable characteristic diagrams in the individual operating states. Such couplings usually involve couplings that cannot be close-loop controlled or open-loop regulated. This means that they have a fixed filling ratio. This filling ratio, by means of the speed ratio between the secondary wheel and the primary wheel, induces a specific transferrable moment, which then corresponds to the moment that can be received at

the exhaust gas turbine with direct coupling, or is proportional to this with coupling via the transfer elements. This applies analogously to the speed. The hydrodynamic coupling is selected as a function of the exhaust gas turbine which is used, wherein, corresponding to the characteristic curves of the exhaust gas turbine as the speeds to be adjusted in a targeted manner, the limiting speed for protection from overloading, which corresponds to the maximum acceptable speed, which also can correspond to the excess speed point in the characteristic diagram of the exhaust gas turbine, and the minimum acceptable speed are given in advance, whereby in both operating points, the torque of the exhaust gas turbine corresponds to a small value, preferably the minimum value, but is not necessarily identical to it. The moment that can be transferred by the hydrodynamic coupling or the moment that can be supported by it is thus a function of the minimum torque at the exhaust gas turbine as well as the maximum acceptable speed of the exhaust gas turbine and a minimum speed as well as ~~the multiplication i in~~ the transfer unit disposed between the exhaust gas turbine and the hydrodynamic coupling.

Please amend the paragraph beginning on page 7, line 5 of the application, as follows:

Therein, the following are shown individually:

FIGS. 1 and 1b illustrate in schematically simplified representation the basic structure of a drive unit configured according to the invention;

FIGS. 2a and 2b illustrate in schematically simplified representation the method according to the invention for optimizing the engine braking effect in the operating state of braking with the engine brake based on patterns of signal flow;

FIGS. 3a and 3b give characteristic coupling curves, in particular, pump characteristics for a coupling used according to the invention with fixed filling ratio and variable filling ratio;

FIG. 4 illustrates the method according to the invention in the operating state of ~~partial load or thrust~~ full load operation, based on a signal flow pattern;

FIG. 5 illustrates the arrangement of the control device relative to the individual components in the driveline, based on an embodiment according to FIG. 1.

Please amend the paragraph beginning on page 7, line 17 of the application, as follows:

Figure 1 illustrates in a schematically simplified representation, which is based on an excerpt from a driveline 1, the basic structure of a turbocompound system 2. The driveline comprises a driving machine in the form of an internal combustion engine 3 and a crankshaft 4. Further, an exhaust gas turbine 5 is provided, which is impinged on by the flow of exhaust gas of internal combustion engine 3. This is connected downstream to a turbocharger 6 and thus is not a component of the latter. The exhaust gas turbine 5 is thus impinged on by an exhaust gas line 7. The exhaust gas turbine 5 is also coupled mechanically with crankshaft 4, i.e., it has a drive connection with it via a transfer device 16. A hydrodynamic coupling 8 is provided in the coupling between crankshaft 4 and exhaust gas turbine 5, i.e., the transfer device 16. This coupling comprises a primary wheel 10 and a secondary wheel 9, which together form a working chamber 11. The hydrodynamic coupling 8 is thus free of a guide wheel or stator. The secondary wheel 9 is thus at least indirectly resistant to rotation with the crankshaft 4, i.e., directly or via additional transfer elements, for example in the form of speed/torque conversion devices in the form of intermediate gears. The primary wheel 10 is connected to the exhaust gas turbine 5 at least indirectly, i.e., preferably directly or via additional transfer elements. In the case shown, the coupling is produced between secondary wheel 9 of the hydrodynamic coupling 8 and the crankshaft 4 via a spur gear set 12. The secondary wheel 9 and the exhaust gas turbine 5 are coupled via another spur gear set 13. The direct coupling or the intermediate connection of other or additional speed/torque conversion devices would also be conceivable. In both cases,

the multiplication of spur gear sets 12 und 13 is formed each time as a step-up gear. The exhaust gas turbine 5 is thus disposed parallel to the crankshaft 4. An arrangement at an angle, which is not shown here, whereby the transfer elements would be configured correspondingly would also be conceivable. The exhaust gas turbine 5 is connected in series to the turbocharger 6 or the engine brake, respectively. The turbocharger 6 is constructed with a first turbine stage, which is coupled to the exhaust gas line 7 and drives a compressor stage 14 in the inlet line 15. The second turbine stage, which is disposed on the side of the first turbine stage which lies downstream, or the compressor stage 14, respectively, is formed by the exhaust gas turbine 5. The mode of operation of drive unit 1 in conventional construction would be characterized essentially by the following named operating states. In the first operating state, which is also called load operation with a high quantity of exhaust gas, the exhaust gas turbine 5 is driven by the flow of exhaust gas in the exhaust gas line 7 and delivers power to the crankshaft 4 via the transfer device 16. This acts positively on the total efficiency of the engine. In a second operating state, which is also denoted partial load operation or thrust operation, only a small quantity of exhaust gas is available in the exhaust gas line 7. The energy contained in the exhaust gas is thus insufficient in the case of conventional drive units to accelerate the exhaust gas turbine 5 to the speed n_3 corresponding to the speed of the internal combustion engine 3, taking into consideration the multiplication in the transfer device 16, in particular, between hydrodynamic coupling 8 and exhaust gas turbine 5. The exhaust gas turbine 5 can be accelerated from the side of crankshaft 4 by means of the drive connection between crankshaft 4 and exhaust gas turbine 5 via the hydrodynamic coupling 8. This leads to the circumstance that power is guided from crankshaft 4 to exhaust gas turbine 5, and this power is no longer available for normal operation and this acts negatively on the engine efficiency. The third operating state in the case of conventional drivelines without the solution according to the invention is characterized by the fact that this state is the braking operation with the engine brake. In this case, the exhaust gas turbine 5 is driven by an elevated flow of exhaust gas in the exhaust gas line 7. The power then flows from the exhaust gas turbine 5 to crankshaft 4. This again acts negatively on the action of the engine brake. In order to avoid the named disadvantages, the operation of the exhaust

gas turbine 5 according to the invention is optimized by controlling the behavior of the power transfer in the transfer device 16 with respect to the operating state of exhaust gas turbine 5. According to the invention, for this purpose, in the operating state of braking operation with the engine brake, the exhaust gas turbine 5 is controlled in such a way that it is driven with a speed n_5, which corresponds to a maximum acceptable speed $n_{max\text{-}5}$, i.e., a so-called limiting speed n_{limit5} of exhaust gas turbine 5. The exhaust gas turbine 5 or its mode of operation can thus be described by a characteristic curve, in which the useful turbine moment M_5 made available by this is smaller than in the case of slower speeds. The limiting speed n_{limit5} thus corresponds to the speed at which disruptions of the exhaust gas turbine 5 can still be reliably prevented. The hydrodynamic coupling ~~5*~~ 8 thus functions as a setting device for the control. In order to limit the speed n_5 of the exhaust gas turbine 5, a torque must be supported via the hydrodynamic coupling 8 integrated in the transfer unit 16. This torque, however, counteracts the braking moment of the engine brake via the connection to the crankshaft 4. Therefore, this braking moment is to be kept to a minimum according to the invention. Since, corresponding to the known characteristic curve of exhaust gas turbine 5, the torque in the case of this limiting speed n_{limit5} is smaller than for slower speeds, the goal is to operate the exhaust gas turbine 5 as often as possible at this operating point. The exhaust gas turbine 5 is thus controlled in such a way that it is operated as much as possible at its maximum speed n_{max5}. At the same time, however, the speed of the internal combustion engine 3 between the turbine side, i.e, the primary wheel 10 of the hydrodynamic coupling 8, and the crankshaft side, i.e., the secondary wheel 9, can be varied.

Please amend the paragraph beginning on page 14, line 10 of the application, as follows:

In the second operating state, the speed n_5 at the exhaust gas turbine 5 is kept at the smallest possible level according to the invention. However, since the speed at the internal combustion engine 3 is variable, it is necessary that a high slip is presented in

coupling 8 in this case of very low torque M. That is, ~~taking into consideration the multiplication,~~ the internal combustion engine 3 rotates relatively more rapidly than the exhaust gas turbine 5. This problem is solved according to the first solution approach by the hydrodynamic coupling 8 with correspondingly invariable characteristic according to Figure 3a for any filling ratio, whereby this characteristic also must satisfy the corresponding requirements with respect to the already described third operating state. This means that the hydrodynamic coupling 8 is operated with a constant filling ratio FG, which is characterized as a function of the slip, or of the speed difference between secondary wheel 9 and primary wheel 10, by a minimum moment M_{min-5} of the exhaust gas turbine, which is proportional to the moment to be transferred via the hydrodynamic coupling 8. The hydrodynamic coupling 8 used is thus designed for both operating states: operating state 3, i.e., braking with the engine brake, and operating state 2, i.e., partial load operation or thrust operation. Thus a hydrodynamic coupling 8 is used, whose characteristic diagram is characterized by a minimum transferable moment M with a very large working range of hydrodynamic coupling 8. The filling ratio FG that characterizes the invariable characteristic and is fixed in advance is selected in such a way that, taking into consideration the transfer elements between the hydrodynamic coupling 8 and the exhaust gas turbine 5, a minimum moment can then be received by the exhaust gas turbine from the side of the crankshaft 4. This invariable coupling characteristic is presented in Figure 3a for both operating states. Figure 3b~~*~~ illustrates, in comparison to the characteristic of a closed-loop control, an open-loop regulated hydrodynamic coupling 8.